



# ENERGY AUDIT

ACTUAL HOME

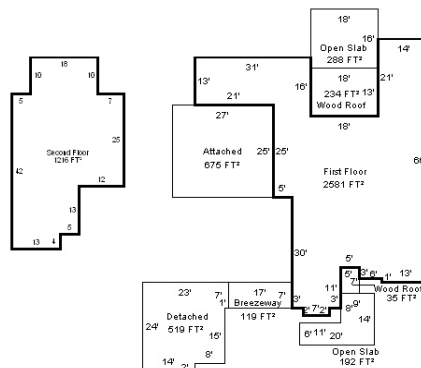
October 23, 2007



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**Customer:**

**Property Address:**



Sketch by Apex IV™

**Date:** 10/23/2007

**Time:** 5:00 pm

**Report ID:**

**Client Is Present:** Yes

**Age Of Home/ Year Built:** 2007

**Blower Door Test:** Yes

**Moisture Test:** No

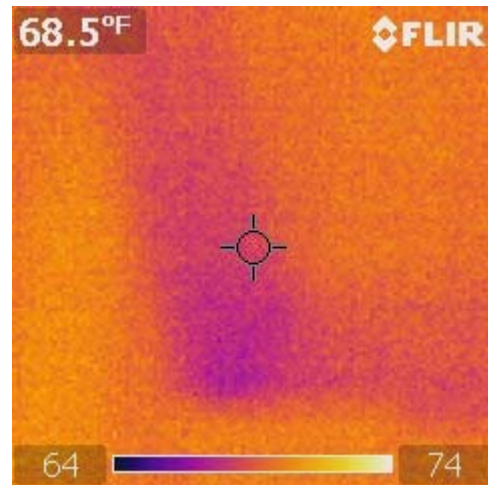
**Weather:** Clear

**Temp:** below 65

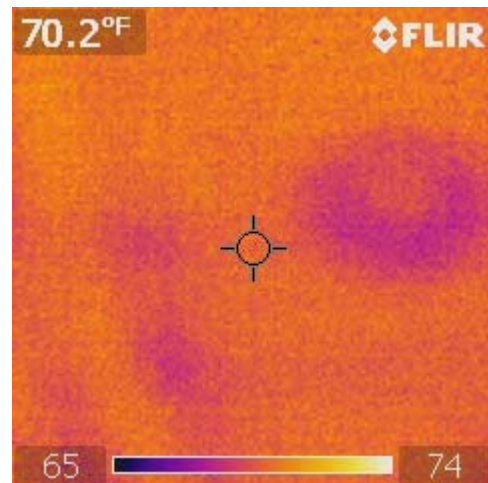
**Rain in last 3 days:** No

**Audited By:** Spencer Huggins, Vladimir Popov, Temur Akhmedov

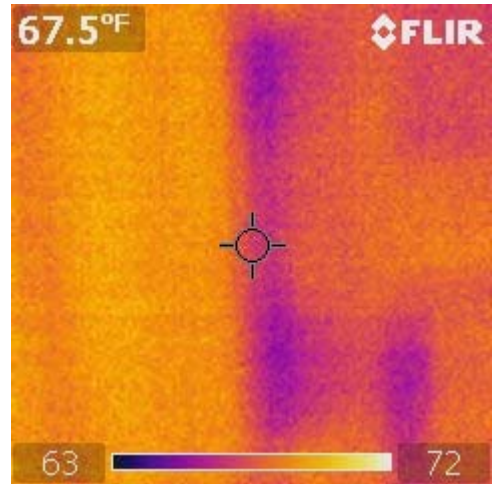
## 1. First Floor



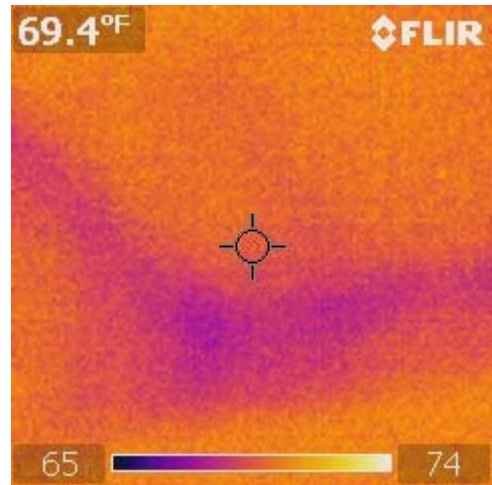
The images above demonstrate heat loss through an unsealed area behind crown molding. There is no need to address this as loss is minimal compared to possible costs of correction.



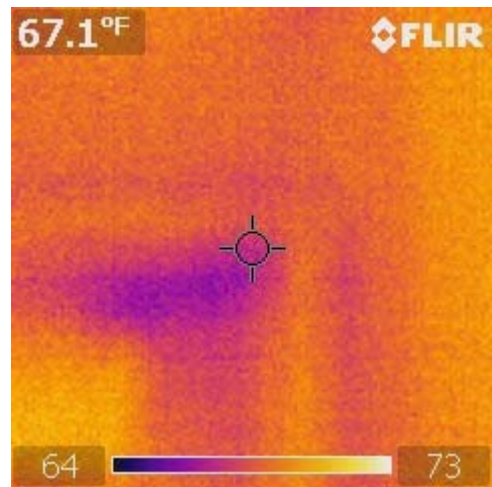
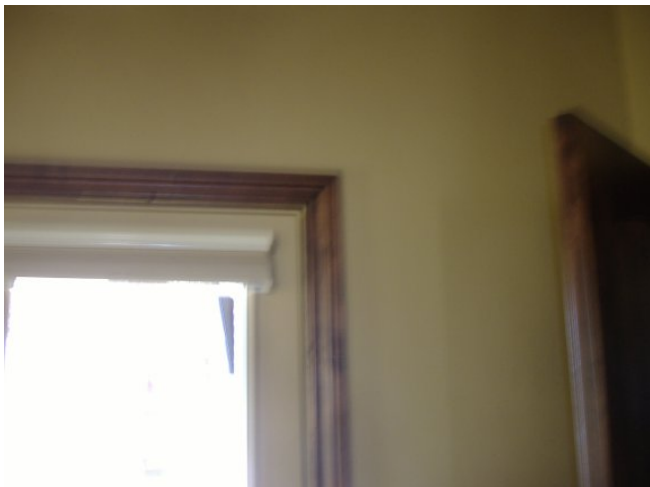
This image shows a recessed light cans being a source of cold air entering the house. Access the light cans of the second floor from the attic. The first floor is a bit more challenging. You probably do not need to do anything, as the costs of correcting the problem will outweigh any possible benefits. Simple change of your incandescent bulbs into compact fluorescents (CFL) bulbs will lower your electric bill.

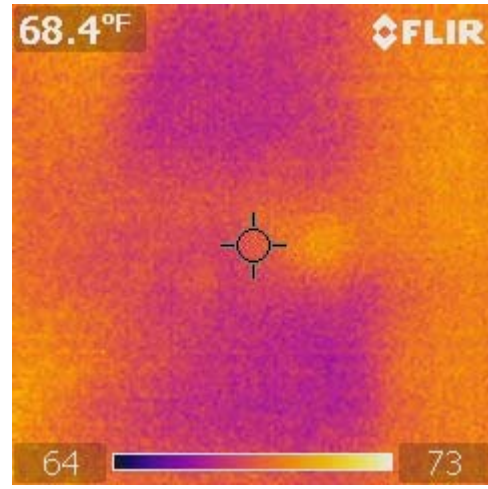


The air leaks around doors are minimal. They allow fresh air access into your house. You do not want your house to be overly tight.

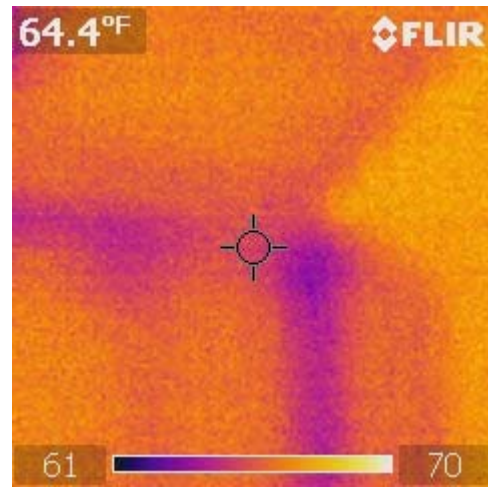


This is another example of sealant missing at the wall-ceiling connection. Not a major problem. Just for your information.



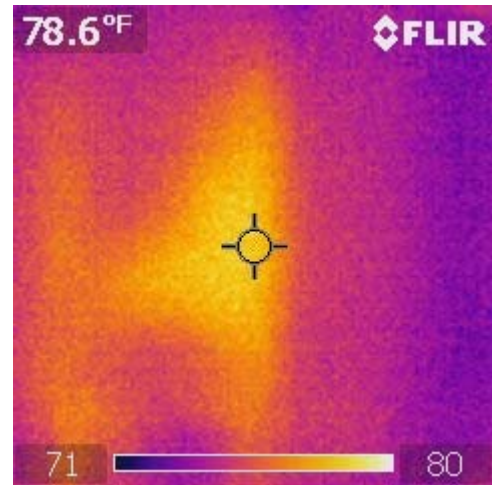


Your light switches and electric outlets are leaking air. They can be resealed from behind. The air leakage shows that there is a way for outside air to travel into your internal walls, most probably through attic-wall connections.

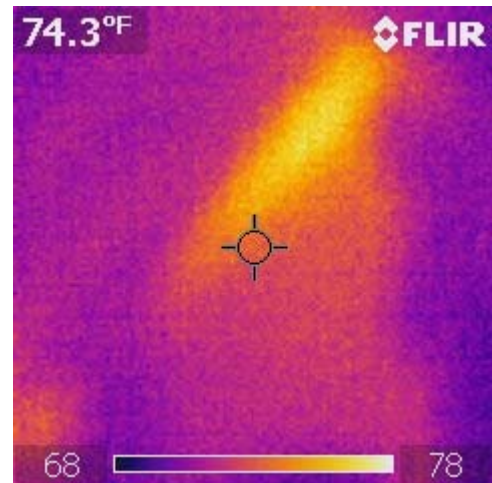
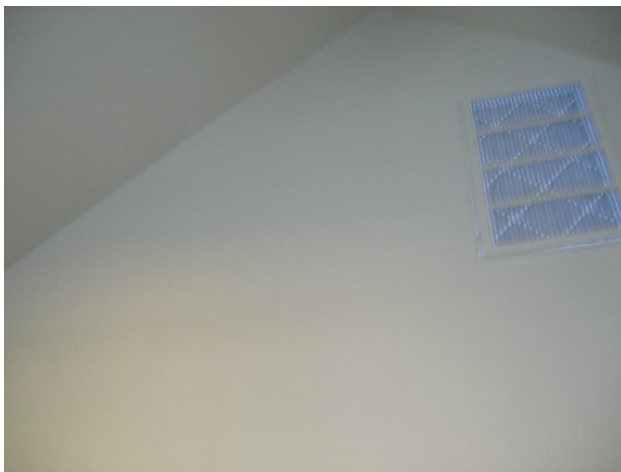


Similar sealant issue. Not a major concern.

## 2. Second Floor



This game room on the second floor gets extra heat through the windows. Window film may address this problem. We have also identified air heat movement within the wall – seen as yellow on image above. Correction of wall seal would not be cost effective.



This area requires examining of insulation batt behind this knee wall. The batt needs to be reattached for better insulation.

### 3. Front Yard



This is a very well constructed property and only has a few issues:

1. The master bedroom temp runs warmer than other areas of the house, the down stairs unit is a 5-ton unit and is sized correctly but the supply air needs to be adjusted or balanced better to serve this area.

Adding more return air the areas may also help.


2. My biggest concern is at the front of the property. The soil seems to be washing out under the driveway. I think the problem is the sewer line running along the front, it looks like it was not con-packed and or not back filled correctly. If this is not corrected, the driveway and even the foundation could be damaged.

## 4. Other



The insulation seems to be in good condition, with a few areas that need to be readjusted in the attic along the 2nd floor hallway. The attic access door needs to be insulated, have batt installed on the attic door.

# General Summary

 <b>CENTAURUS</b> technologies & innovations	A: 710 Asp Ave., Ste 304, Norman, OK 73069 T: 405.229.9165 F: 866.661.5253 E: <a href="mailto:takhmedov@centaurustech.com">takhmedov@centaurustech.com</a> W: <a href="http://www.centaurustech.com">www.centaurustech.com</a>
<b>Customer:</b>	<b>Property Address:</b>

The objectives of this Energy Audit were to identify air leak and heat loss areas. Some of the issues can be addressed effectively with limited resources. Other issue can only be addressed while performing major renovation work.

\* We would recommend weather stripping of all doors connecting unconditioned space with inside of the house (main door, door into the backyard, and attic entrance door), and attic access hole. The air leaks on the second floor create a negative pressure by allowing hot air out and pulling cold air in through the leaks of the first floor. Sealing these air leaks should noticeably improve comfort levels for residents. Attaching a piece of insulation batt, and attaching weather strip along the edge of the lid could easily insulate Attic access door. This will create an insulated air sealed door.

\* Your light switches, electric outlets and recessed light cans are a major source of air leakage. Light switch and electric outlet boxes could be insulated from behind with special foam boxes. Recessed light cans can be re-insulated from the attic ONLY IF YOU CHANGE YOUR EXISTING BULBS TO COMPACT FLUORESCENT. REGULAR BULBS REQUIRE VENTILATION TO MANAGE HEAT AND AVOID DANGER OF FIRE.

\* Consider application of special clear window film, which blocks up to 40% of solar and radiant heat, and 99% of UV, which causes fading of furniture and carpeting. Ask Centaurus representative about availability and costs. We can provide free cost estimate on site.

\* Radiant barrier installed with decking will keep your heating and cooling bills substantially lower compared to similar homes built conventionally.

Centaurus Technologies and Innovations, Inc provide this Energy Audit as a recommendation. Energy savings heavily depend on homeowners' actual usage. Suggested measures may not bring significant results relative to actual levels of energy consumption. We do not guarantee any results.

Centaurus Technologies and Innovations, Inc. offer a line of energy efficiency products and technologies, both retail and through our industry partners. At this point, at our Oklahoma office, we offer efficient lighting, radiant floor heating, solar tube skylights, solar water heating for swimming pools, solar attic fans, insulating lids for attic access doors, insulation box inserts for electric outlets, instant water heaters and point-of-use water heaters, best available on the market clear window films blocking up to 40% of solar heat and 99% of UV rays (these cause fading of furniture and surfaces). Ask local representative for additional information on these and any other energy efficiency related items. You could also visit our website at [www.centaurustech.com](http://www.centaurustech.com) for additional information. Website is regularly updated.

After you complete work based on this report, or any other additional energy efficiency work, we can perform another Energy Audit to certify your house. While this Certificate does not guarantee any additional appraised value, you can use it as an additional selling tool to promote your property.

Thank you for Centaurus Technologies and Innovations, Inc for your energy efficiency needs.

Temur Akhmedov



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## INVOICE

Date: October 23, 2007

Invoice #:

Customer:

Item #	Description	Count	Price per unit	Total
1	Energy Audit			
2	This Energy Audit qualifies your house for a drawing. You may win a roof top solar power system (2.5kW PV system)			
3				
4				
5				

Subtotal  
Sales Tax

Total Due

Customer Signature \_\_\_\_\_

Representative Signature \_\_\_\_\_